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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,335	07/11/2003	Kirt A. Debique	MS1-1538US	5260
22801 7590 01/29/2009				
LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201				
EXAMINER				
BOUTAH, ALINA A				
ART UNIT		PAPER NUMBER		
2443				
MAIL DATE		DELIVERY MODE		
01/29/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/618,335

Applicant(s)

DEBIQUE ET AL.

Examiner

ALINA N. BOUTAH

Art Unit

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13, 15-30, 32-35, 37-44 and 46-49 is/are pending in the application.
- 4a) Of the above claim(s) 50-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 15-30, 32-35, 37-44 and 46-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-949)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/14/08; 11/18/08; 1/19/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Applicant's amendment filed November 18, 2008. Claims 5, 14, 31, 36 and 45 have been cancelled. Claims 1-4, 6-13, 15-30, 32-35, 37-44 and 46-49 are pending in the present application.

Election/Restrictions

Applicant's election without traverse of claims 1-49 in the reply filed on November 18, 2008 is acknowledged. Applicant is reminded that the non-elected claims must be allowed should the application become allowed.

Claim Rejections - 35 USC § 101

In view of Applicant's amendment, the rejection of claims 10 and 27-38 under 35 U.S.C. 101 are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-13, 15-30, 32-35, 37-44 and 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (US Patent No. 6,466,971) in view of Robinson et al. (US 2005/0198189).

Regarding claim 1, Humpleman teaches a method comprising:

requesting data to be streamed from a source device to a client device over a network (col. 8, line 63 – “user request for service”); and

resolving a distributed topology from the request, wherein: the distributed topology references a plurality of software components that, when executed, fulfill the request (col. 10, lines 1-18); and

at least one of the plurality of software components is executable on each of:
the source device (col. 9, lines 9-18); and
the client device (col. 2, lines 52-63).

However, Humpleman does not explicitly teach building a distributed software infrastructure from an optimized distributed topology the built distributed software infrastructure configured to stream data to the client device from the source device without rendering the data by the source device.

In an analogous art, Robinson teaches streaming data to the client device from the source device without rendering data by the source device (abstract). At the time the invention was made, one of ordinary skill in the art would have been motivated to stream data to the client from the source without rendering data by the source device in

order to preserve time and bandwidth at the time of transmission, thus making the network more efficient.

Regarding claim 2, Humpleman teaches a method as described in claim 1, wherein the resolving further comprises: discovering the capabilities of the client device to render a stream of data (col. 2, lines 52-63); discovering the capabilities of the source device to stream data that is to be rendered (col. 9, lines 9-18); and deriving the distributed topology from both said capabilities (col. 10, lines 1-19).

Regarding claim 3, Humpleman teaches a method as described in claim 1, wherein the distributed topology is selected from the group consisting of: a remote sink distributed topology (figure 9 – sink server); a remote source distributed topology (figure 8 – source server); and a third party distributed topology (col. 7, line 20 - external server).

Regarding claim 4, Humpleman teaches a method as described in claim 1, further comprising building a distributed software infrastructure from the distributed topology, wherein the distributed software infrastructure includes the plurality of software components (figure 17).

Regarding claim 6, Humpleman teaches a method as described in claim 1, wherein: the request also requests streaming data from an additional source device to

the client device; and the resolving resolves the distributed topology such that the plurality of software components, when executed, fulfills the request to stream data from each of the source device and the additional source device, respectively, to the client device (col. 6, line 66 to col. 7, line 23).

Regarding claim 7, Humpleman teaches a method as described in claim 1, wherein: the request also requests streaming data from the source device to an additional client device; and the resolving resolves the distributed topology such that the plurality of software components, when executed, fulfills the request to stream data from the source device to each of the client device and the additional client device (figure 3 – different clients).

Regarding claim 8, Robinson teaches a method as described in claim 1, wherein the distributed software infrastructure includes a distributed media session that provides a federated mechanism for control, whereby: the at least one software component that is executable on the source device is controllable by the distributed media session; and the at least one software component that is executable on the client device is controllable by the distributed media session (abstract).

Regarding claim 9, Humpleman teaches a method as described in claim 1, wherein the resolving is executed without user intervention on a device selected from

the group consisting of: the source device; the client device; and a third party device (col. 2, lines 24-36).

Claim 10 recites limitations similar to claim 1, but executed in computer-readable medium. It is rejected under the same rationale as claim 1.

Regarding claim 11, Humpleman teaches a method comprising:

receiving a request to stream data from a source device to a client device over a network (col. 8, line 63 – “user request for service”); and

resolving a distributed topology that references software components to fulfill the request (col. 10, lines 1-18), wherein the distributed topology is resolved from:

capabilities of the client device to render a stream of data (col. 2, lines 52-63);

and

capabilities of the source device to stream data that is to be rendered (col. 9, lines 9-18); and

building from the distributed topology a distributed software infrastructure that includes the referenced software components (i.e. API description), wherein at least one of the software components is executable on each of: the source device (col. 9, lines 9-18); and the client device (col. 10, lines 1-18).

Regarding claim 11, Humpleman teaches a method comprising:

receiving a request to stream data from a source device to a client device over a network (col. 8, line 63 - “user request for service”); and

resolving a distributed topology that references software components to fulfill the request (col. 10, lines 1-18), wherein the distributed topology is resolved from:

capabilities of the client device to render a stream of data (col. 2, lines 52-63);
and

capabilities of the source device to stream data that is to be rendered (col. 9, lines 9-18); and

building from the distributed topology a distributed software infrastructure that includes the referenced software components (i.e. API description), wherein at least one of the software components is executable on each of: the source device (col. 9, lines 9-18); and the client device (col. 10, lines 1-18).

However, Humpleman does not explicitly teach building a distributed software infrastructure from an optimized distributed topology the built distributed software infrastructure configured to stream data to the client device from the source device without rendering the data by the source device.

In an analogous art, Robinson teaches streaming data to the client device from the source device without rendering data by the source device (abstract). At the time the invention was made, one of ordinary skill in the art would have been motivated to stream data to the client from the source without rendering data by the source device in order to preserve time and bandwidth at the time of transmission, thus making the network more efficient.

Regarding claim 12, Humpleman teaches a method as described in claim 11, wherein the distributed topology is selected from the group consisting of: a remote sink distributed topology (figure 8 – sink server); a remote source distributed topology (figure 8 – source server); and a third party distributed topology (col. 7, line 20 - external server).

Regarding claim 13, Humpleman teaches a method as described in claim 11, wherein the resolving further comprises: discovering the capabilities of the client device to render a stream of data; discovering the capabilities of the source device to stream data that is to be rendered; and deriving a distributed topology from both said capabilities, wherein the distributed topology references the software components (col. 10, lines 1-18).

Regarding claim 15, Humpleman teaches a method as described in claim 11, wherein the distributed topology references a distributed media session that provides a federated mechanism for control such that: the at least one software component that is executable on the source device is controllable by the distributed media session; and the at least one software component that is executable on the client device is controllable by the distributed media session (col. 8, lines 48-63 - session manager).

Regarding claim 16, Humpleman teaches a method as described in claim 11, wherein the receiving and the resolving are executed without user intervention on a

device selected from the group consisting of: the source device; the client device; and a third party device (col. 2, lines 24-36).

Regarding claim 17, Humpleman teaches one or more computer-readable media comprising computer-executable instructions that, when executed, perform the method as recited in claim 11 (see rejection of claim 11).

Claims 18-25 are similar to claims 11-17, respectively, therefore are rejected under the same rationale.

Regarding claim 26, Humpleman teaches a method comprising:

receiving a request to stream data from a source device to a client device (col. 8, line 63 – “user request for service”);

discovering the capabilities of the client device to render a stream of data (col. 2, lines 52-63);

discovering the capabilities of the source device to stream data that is to be rendered (col. 9, lines 9-18);

deriving a distributed topology to fulfill the request from both said capabilities, wherein the distributed topology references a plurality of software components (col. 10, lines 1-18);

building from the distributed topology a distributed software infrastructure, wherein the distributed software infrastructure includes said software components referenced by the distributed topology (i.e. API description); and

streaming the data from the source device to the client device over the network (col. 7, line 62-col. 8, line 14); and rendering the data by the client device (col. 7, line 62-col. 8, line 14).

However, Humpleman does not explicitly teach building a distributed software infrastructure from an optimized distributed topology the built distributed software infrastructure configured to stream data to the client device from the source device without rendering the data by the source device.

In an analogous art, Robinson teaches streaming data to the client device from the source device without rendering data by the source device (abstract). At the time the invention was made, one of ordinary skill in the art would have been motivated to stream data to the client from the source without rendering data by the source device in order to preserve time and bandwidth at the time of transmission, thus making the network more efficient.

Claims 27-30 are similar to claims 1-4, respectively, and therefore are rejected under the same rationale.

Claims 32-35 are similar to claims 1-4, respectively, and therefore are rejected under the same rationale. The only difference is that it is being resolved without user

intervention. Humpleman teaches that resolving automatically. This implies that it is being done without user intervention as described.

Claim 37 is similar to claim 18, therefore is rejected under the same rationale.

Claim 38 is similar to claim 20, therefore is rejected under the same rationale.

Regarding claim 39, Humpleman teaches a system comprising:

a source device that is operable to stream data to be rendered (figure 8: 14);

a client device that is operable to render a stream of data (figure 8: 12); and

a distributed media session (control/action response), which when executed, causes actions to be performed including: resolving a distributed topology that references a plurality of software components that, when executed, stream data from the source device to the client device over a network (col. 10, lines 1-18); and

and wherein at least one of the said software components is executable on each of:

the source device (col. 9, lines 9-18); and

the client device (col. 2, lines 52-63).

However, Humpleman does not explicitly teach building a distributed software infrastructure from an optimized distributed topology the built distributed software infrastructure configured to stream data to the client device from the source device without rendering the data by the source device.

In an analogous art, Robinson teaches streaming data to the client device from the source device without rendering data by the source device (abstract). At the time the invention was made, one of ordinary skill in the art would have been motivated to stream data to the client from the source without rendering data by the source device in order to preserve time and bandwidth at the time of transmission, thus making the network more efficient.

Regarding claim 40, Humpleman teaches a system as described in claim 39, wherein the source device is selected from the group consisting of: a computing device which is locally connected to a source peripheral device (figure 3); and a network-ready device that is operable to stream data that is to be rendered (figure 3).

Regarding claim 41, Humpleman teaches a system as described in claim 39, wherein the client device is selected from the group consisting of: a computing device which is locally connected to a rendering device (figure 3); and a network-ready device suitable for rendering data (figure 3).

Regarding claim 42, Humpleman teaches a system as described in claim 39, wherein the resolving further comprises: discovering the capabilities of the client device to render a stream of data (col. 2, lines 52-63); discovering the capabilities of the source device to stream data that is to be rendered (col. 9, lines 9-18); and deriving the distributed topology from both said capabilities (col. 10, lines 1-18).

Regarding claim 43, Humpleman teaches a system as described in claim 39, wherein the distributed topology is selected from the group consisting of: a remote sink distributed topology (figure 8: 34); a remote source distributed topology (figure 3: 32); and a third party distributed topology (col. 7, line 20 - external server).

Regarding claim 44, Humpleman teaches a system as described in claim 39, wherein the building further comprises supplying at least one software component that is referenced by the distributed topology (figure 17).

Regarding claim 46, Humpleman teaches a system as described in claim 39, wherein the execution of the distributed media session is performed by one of: the source device; the client device; and a third party device (col. 2, lines 24-36).

Claims 47-49 are similar to claims 39-41, therefore are rejected under the same rationale.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during the process of responding to this Office Action. It is further noted that any alternative and non-preferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

The prior art listed in the PT0-892 form included with this Office Action disclose methods, systems, and apparatus similar to those claimed and recited in the specification. The Examiner has cited these references to evidence the level and/or knowledge of one of ordinary skill in the art at the time the invention was made, to provide support for universal facts and the technical reasoning for the rejections made in this Office Action including the Examiner's broadest reasonable interpretation of the claims as required by MPEP 2111 and to evidence the plain meaning of any terms not defined in the specification that are interpreted by the Examiner in accordance with MPEP 2111.01. The Applicant should consider these cited references when preparing a response to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALINA N. BOUTAH whose telephone number is (571)272-3908. The examiner can normally be reached on Monday-Thursday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia L.M. Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alina N Boutah/
Examiner, Art Unit 2443